Algebra 2
Unit #1
WS #1

CLASS EXERCISES

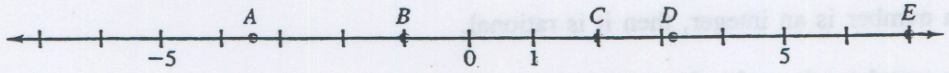
Use the diagram on page 3 to name the subset(s) of the real numbers to which each of the following belongs.

1. 7 2. -8 3. 3 4. $-5.777\ldots$ 5. $\sqrt{5}$

Determine the correct relationship between each pair of numbers. Use the symbols $>$, $<$, or $=$.

6. $-3 \underline{?} -8$ 7. $8.2 \underline{?} 8.03$ 8. $39 \underline{?} -2$
9. $0 \underline{?} 5$ 10. $0 \underline{?} -4.80480080008\ldots$ 11. $6.0 \underline{?} 6.00$

12. Name the point which corresponds to each of these coordinates: -3.5, π, 7, -1, and 2.



Show that each decimal can be written as a quotient of two integers.

13. 0.34 14. $0.\overline{7}$ 15. $0.\overline{26}$

PRACTICE EXERCISES

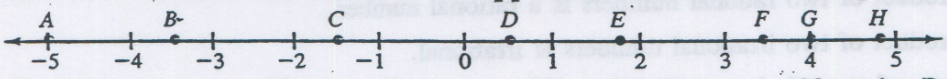
Use the diagram on page 3 to name the subsets of the real numbers to which each of the following belongs.

1. 4 2. $\sqrt{2}$ 3. π 4. -6 5. 0
6. 103 7. $0.666\ldots$ 8. -0.5 9. 2.5 10. $2\sqrt{6}$

Draw a number line and place each number on the line in its approximate location.

11. 0 12. $-\sqrt{24}$ 13. -2 14. $2\frac{1}{2}$ 15. $4\frac{2}{3}$ 16. π

Give the coordinate that indicates the approximate location of each point.



17. point A 18. point B 19. point C 20. point D
21. point E 22. point F 23. point G 24. point H

Write a comparison statement for each pair of numbers using $<$, $=$, or $>$.

25. $-7 \underline{?} -9$ 26. $3 \underline{?} 3$ 27. $14 \underline{?} \sqrt{14}$
28. $\sqrt{6} \underline{?} \sqrt{10}$ 29. $0 \underline{?} -0.333\ldots$ 30. $0.8 \underline{?} \frac{4}{5}$

Show that each decimal can be written as a quotient of two integers.

31. 0.32 32. 1.8 33. 0.22 34. 2.125
35. $0.\overline{6}$ 36. $0.\overline{17}$ 37. $0.\overline{45}$ 38. $0.\overline{135}$

Convert each fraction to decimal form.

39. $\frac{3}{8}$ 40. $\frac{7}{25}$ 41. $\frac{6}{11}$ 42. $\frac{2}{7}$